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Walsh

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[54] AIRBAG PROPELLANT

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represented by the Secretary of the  
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[58] Field of Search ..... 280/741; 149/19.91;  
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[57] ABSTRACT

A plasticizer-free propellant for inflating passenger airbags in vehicles comprising from about 78 to about 90 weight percent of cyclotrimethylenetrinitramine (RDX) and from about 10 to about 22 weight percent of a plasticizer-free polymer binder formed by curing a mixture of a polyoctenamer and a polymer comprising an acrylate polymer or a methacrylate polymer having a glass transition temperature of  $-30^{\circ}$  C. or lower and 0.01 to 5 weight percent based on the total amount of the monomers, of a crosslinking monomer having two or more double bonds of substantially the same reactivity in the molecule or one double bond and a crosslinking functional group such as an epoxide ring, a hydroxyl group, or a carbonyl group. This propellant is useful in hybrid inflators for air/safety bags in vehicles.

42 Claims, 1 Drawing Sheet